

**ABSTRACT OF THE DISCLOSURE**

Transmission characteristics of a multiplicity of light signals each having a different frequency are compensated for simply and at a high accuracy by use of a single type of or a few types of variable optical equalizers, thereby enabling an optical multiplex transmission system having excellent transmission band characteristics to be implemented. Variable Faraday rotators 51, 52 and a polarization dependent element 6 are disposed on an optic axis (Z-axis) extending between an input-side fiber collimator 21 for emitting in the form of a beam signal light transmitted over an optical fiber 1 and an output-side fiber collimator 22 for causing the optical fiber 1 to transmit the signal light input in the form of a beam.